

Title (en)
METHOD FOR PRODUCING A WELDED SUBSTRATE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON EINEM GESCHWEISSTEN SUBSTRAT

Title (fr)
MÉTHODE PERMETTANT DE PRODUIRE D'UN SUBSTRAT SOUDÉ

Publication
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Application
EP 17771318 A 20170327

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• US 2017024351 W 20170327

Abstract (en)
[origin: WO2017165891A1] A welding process may be configured to convert a substrate into a welded substrate by applying a process solvent to the substrate, wherein the process solvent interrupts one or more intermolecular force between one or more component in the substrate. The substrate may be configured as a natural fiber, such as cellulose, hemicelluloses, and silk. The process solvent may be configured as an ionic-liquid based solvent and the welded substrate may be a congealed network after the process solvent has been adequately swollen and/or mobilized the substrate. A welding process may be configured such that individual fibers of a substrate are not fully dissolved such that material in the fiber core may be left in the native state by controlling process variables. The welding process fibers may have a tenacity 10% or 20% greater or a diameter 25% less than that of a cellulosic-based yam substrate.

IPC 8 full level
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